

swamp and killed the large trees in it. This evidence suggests that the site has been occupied by Scrub-birds for a long period, despite human interference and fires. If the habitat is maintained in its present form there is no reason why the species should not continue here indefinitely. The site would make a very convenient study area and a scientific tourist resort.



Fig 2.—Habitat of the Noisy Scrub-bird, Albany district.

I hope to continue observations and record its life history as fully as possible. The precise locality is not given for obvious reasons and it is hoped that the area will shortly become a bird sanctuary. The photograph shows part of its habitat and the field sketches, though not especially good, do give some idea of the throat markings and the tail. The bird is extremely difficult to photograph and much patient work will be needed to obtain a good portrait.

MACRODERMA GIGAS SATURATA (CHIROPTERA, MEGADERMATIDAE)

A NEW SUBSPECIES FROM THE KIMBERLEY DIVISION OF WESTERN AUSTRALIA

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INTRODUCTION

Adult specimens of *Macroderma gigas* from the south-western part of the Kimberley Division (Derby), throughout the Pilbara district, to the Warburton Ranges in the south-east of Western Australia, have a predominantly white ventral surface and agree in all respects with the original description of *Macroderma gigas* (Dobson, 1880), which is based upon a single specimen collected at

Mt. Margaret, Wilson River, Central Queensland. However, specimens from the north-west Kimberley Division (Kalumburu) and Arnhem Land (Millingimbi) are distinctly different and merit nomenclatural separation as a subspecies.

Macroderma gigas saturata subsp. nov.

Diagnosis: The new subspecies differs from the nominate race in its very distinct colour. In adults of the new subspecies the basal three-fourths of the hairs on the dorsal surface are Deep Mouse Gray changing to Hair Brown in the terminal quarter (colour names with initial capitals from Ridgway's *Color Standards and Nomenclature*). On the ventral surface the basal quarter of each hair is Neutral Gray and the terminal three-fourths off-white. The hair of the throat is off-white to its roots. Individual specimens vary in shades of brown and gray.

By comparison, in adults of the nominate subspecies, dorsal hairs are basally Pale Neutral Gray for one-third of their length while the terminal two-thirds are Pale Drab Gray. All hair on the ventral surface is white to the roots.



Fur colour in races of *Macroderma gigas*, 1-4, *M. g. saturata*; 5-6, *M. g. gigas*. 1.—Fur from dorsal surface of holotype of *M. g. saturata*. 2.—From ventral surface of holotype of *M. g. saturata*. 3.—From dorsal surface of ♂ paratype of *M. g. saturata* (M 4415). 4.—From ventral surface of ♂ paratype of *M. g. saturata*. 5.—From dorsal surface of ♀ *M. g. gigas* (M 4637). 6.—From ventral surface of ♀ *M. g. gigas* (M 4637).

Membranes (ie. ears and wing membranes) are brownish in *M. g. saturata*, but there is some individual variation. These membranes are pinkish white in *M. g. gigas*.

It should be noted that immature specimens of *Macroderma gigas* (of both subspecies) are much darker ventrally and browner dorsally than adults and comparisons should be made only between fully adult specimens.

There is considerable variation in measurements of *Macroderma* over the whole of its range but no consistent difference in size can be determined between the various populations.

Holotype. Western Australian Museum No. M 4416 ♀ (gravid). Collected in a cave at Kalumburu, north-west Kimberley Division (180 miles N.W. of Wyndham), on June 23, 1960, by A. M. Douglas. Paratypes M 4415 ♂ and M 4418 ♀ both collected with the type.

DESCRIPTION OF HOLOTYPE

A female in spirit (including embryo). Portion of skin removed from dorsal and ventral surfaces and mounted dry on card. This specimen had been in spirit for 12 months and kept in darkness before the removal of the portions of skin.

Live weight with embryo, 139 gm. Weight of the embryo, 1.7 gm. Weight of holotype removed from spirit, 141 gm. Length, 125 mm.; over the curves, 141 mm. Head, 44 mm. Ear, 52.4 mm.; tragus, anterior lobe, 13.5 mm.; posterior lobe, 25.2 mm. Nose leaf, 19 x 11 mm. Fore arm, 100.5 mm. Metacarpals—2nd finger, 78.5 mm.; 3rd finger, 69.2 mm.; 4th finger, 76.2 mm.; 5th finger, 79 mm. Tibia, 44 mm. All measurements, with the exception of the live weight, are taken from the preserved spirit specimen.

The animal is generally dark, especially on the flanks; the throat is lighter and there is another light patch on the thighs. Teeth are worn and the membranes of the wings and ear are brownish.

The clitoris and vulva are both enlarged and both inguinal and pectoral mammae are enlarged.

DISCUSSION

These dark coloured populations of *Macroderma gigas* were first brought to my notice on a visit to Kalumburu Mission in June 1960 where I examined a series of 70 individuals in one cave and collected four fully adult specimens. All of these were dark on the ventral surface. My host at the Mission, Fr. S. Sanz, O.S.B., assured me that these bats were invariably dark and he pointed out that the name "Ghost Bat," the accepted vernacular name in the south for this species, is singularly inappropriate for the Kalumburu form. Specimens of *Macroderma gigas* received at the Museum from Millingimbi Mission in Arnhem Land in June-July 1960 belong to this same dark form.

REFERENCE

DOERSON, G. E. 1880. On some new or rare species of Chiroptera in the collection of the Göttingen Museum. *Proc. Zool. Soc. London*; 461-462, pl. 46.